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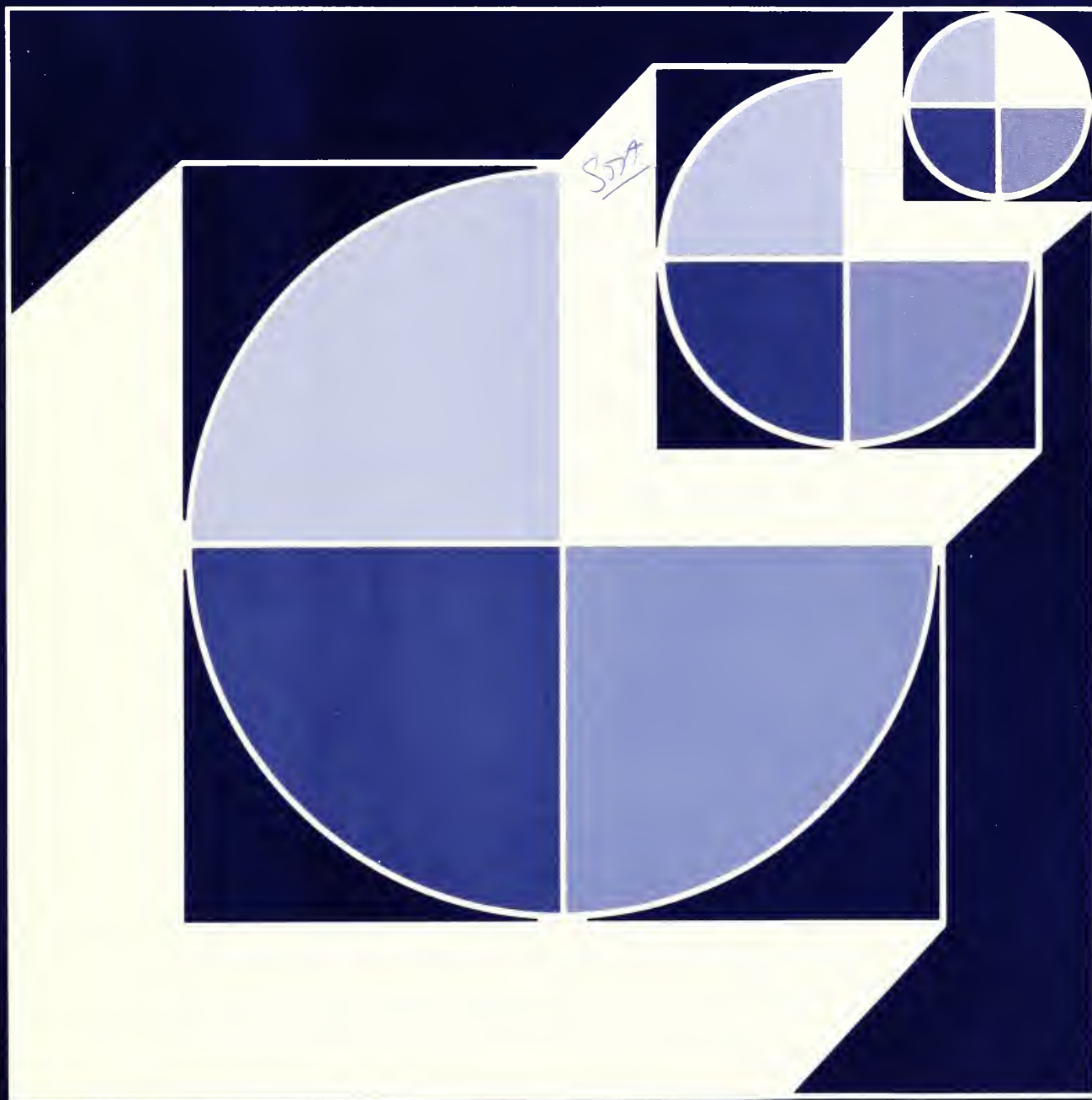
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# Family Economics Review

1987  
No. 3

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# Family Economics Review

1987 No. 3

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**Editor**  
Joan C. Courtless

**Managing Editor**  
Sherry Lowe

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Suggestions or comments concerning this publication should be addressed to:

Joan C. Courtless, Editor,  
**Family Economics Review**,  
Family Economics Research Group,  
USDA/ARS, Federal Building,  
Room 442A, Hyattsville, Md. 20782.

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Issued July 1987

# The Housing Situation of American Children

By Nancy E. Schwenk  
*Consumer economist*

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The welfare of our Nation's children has been an area of increasing concern in recent years. In 1983, 44% of American households included children under the age of 18. Married-couple families accounted for 79% of these households, 19% were female householders, and 2% were male householders (6). Of these households with children, 70% lived in owned homes and 30% lived in rented homes. This article will examine the housing conditions and housing expenditures of households with children under age 18.

## SOURCE OF DATA

Data are from the 1982-83 Consumer Expenditure Interview Survey (CES), a continuing survey conducted by the Bureau of Labor Statistics, U.S. Department of Labor (8). The Survey has a rotating sample of 5,000 consumer units. A consumer unit, or household, is either (1) all members of a particular household who are related by blood, marriage, adoption, or other legal arrangement; (2) a person living alone or sharing a household with others, or living as a roomer in a private home, lodging house, hotel or motel, but who is financially independent; or (3) two or more persons living together who pool their income to make joint expenditure decisions.

This study is based on responses from 12,730 households who reported positive income and who had participated in the Survey during 1983. Households were asked about expenditures for housing for the previous 3 months. Comparisons were made with data from the 1983 Annual Housing Survey (AHS),<sup>1</sup> which was sponsored by the U.S. Bureau of the Census.

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<sup>1</sup> Renamed the "American Housing Survey" in 1984 and is currently being conducted every other year.

## HOUSING SITUATION

### Owners vs. Renters

The CES sample was divided into four groups of households for the purpose of making housing-related comparisons: Homeowners with children, homeowners without children, renters with children, and renters without children. Owners comprised 62% of the Survey households. The category of owners includes both households who were paying off a mortgage and those who had no mortgage payments. One-half of the homeowners had children; among renters, 35% had children in the household. These figures can be compared with results from the 1983 AHS in which 38% of homeowners and 35% of renters had children (7).

The older the children in CES households, the more likely the household owned, rather than rented, their home. In households with children all under age six, 39% were renters. Only 19% of households with the oldest child between ages 6 and 17 years were renters, and 15% of those with the oldest child over 17 years. Also, the older the children, the more likely the household had paid off their mortgage.

In households headed by single parents, 43% of mothers, compared with 72% of fathers, were homeowners. Most homeowners with children had an income of \$30,000 or more, whereas most renters with children had an income of under \$20,000.

### Housing Characteristics

Physical characteristics of the homes inhabited by the four groups of households are shown in table 1. The great majority of homeowners with children lived in single-family detached homes, whereas most renters with children lived in multifamily dwellings. These multifamily dwellings include townhouses, row houses, duplexes, garden and high-rise apartments, and flats. A third type dwelling is mobile homes, which according to the AHS, accounted for 4% of all year-round housing units in 1983 (7). Less than one-half of CES households living in mobile homes had children. Most of those with children owned their mobile home. Only 4% of CES owners with children and 2% of renters with children lived in mobile homes.



In comparing the four groups of households, owners with children were more likely than other households to live in the newest homes (those built since 1970); owners without children most often reported their home was built between 1950 and 1969. Renters with and without children were more likely to live in the oldest homes (built before 1950).

Differences in the size of homes were found among the four groups of CES households. Most renters without children lived in homes of one to four rooms. The homes of the other three groups of households usually contained five to seven rooms. Over one-quarter of owners with children lived in homes with eight rooms or more.

Very few households in the Survey lived in public housing. Also, very few households reported any government assistance in paying part of their housing costs.

When the CES sample was divided into only two groups--households with children and households without children--it was found that 75% of households with children lived in single-family detached homes, two-fifths lived in homes built since 1970, and over two-thirds lived in households with two or more earners and annual incomes of \$20,000 or greater. Only 1% of households with children lived in public housing.

### Housing Expenditures

Annual housing expenditures for the four groups of CES households are shown in table 2. Housing expenses were found to be highest for owners with children and lowest for renters with no children. However, as a percentage of income, renters with children spent a larger portion of their income on housing and owners with no children spent a smaller share on housing than the other households. Households with children most

Table 1. *Housing characteristics of CES households, 1983*

Characteristics	Owners, no children	Owners with children	Renters, no children	Renters with children
	(percent of households)			
Description of building:				
Single family detached .....	83	90	20	41
Multifamily <sup>1</sup> .....	12	6	79	57
Mobile home .....	5	4	1	2
Year home was built:				
1970 or later .....	27	42	32	32
1950-1969 .....	41	36	29	32
Before 1950 .....	32	22	39	36
Number of rooms:				
1-4 .....	14	6	69	43
5-7 .....	70	68	29	52
8 or more .....	16	26	2	5
Living in public housing.....	( <sup>2</sup> )	0	1	4
Government paying part of housing costs .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	4
Sample size .....	3,863	3,904	3,213	1,750

<sup>1</sup> Includes townhouses, row houses, duplexes, garden and high-rise apartments, and flats.

<sup>2</sup> Less than 1%.

often had two earners, and households without children most often had one earner. Mean family income (before taxes) was considerably higher for owners than for renters.

Meeks (4), in an analysis of the 1980 Census of Population and Housing, found that average housing costs for owners and renters are highly correlated with income. She found the big difference in percent of income spent on housing to be between owners and renters, with renters spending a greater proportion of their income than owners. These findings are consistent with those of the CES concerning housing expenditures of owners versus renters.

When the "other lodging" and "furnishings and equipment" expenditures are removed from the components making up total housing expenditures, the percent of income allocated to housing ranged from 17% (owners with no children) to 25% (renters with children). Housing expenses remained highest for owners with children (\$6,917) and lowest for renters with no children (\$3,745). A comparable definition of housing expenditures was used in the 1983 AHS and included expenses for real estate taxes, property insurance, utilities, fuel, water, trash

Table 2. Mean annual housing expenditures of CES households, 1983

Item	Owners, no children	Owners with children	Renters, no children	Renters with children
Housing .....	\$7,050	\$8,460	\$4,475	\$5,598
Mortgage interest <sup>1</sup> .....	1,871	2,899	--	--
Property tax .....	676	654	--	--
Household maintenance <sup>2</sup> .....	687	626	--	--
Utilities <sup>3</sup> .....	1,899	2,190	854	1,362
Household operations <sup>4</sup> .....	251	498	73	464
Other lodging <sup>5</sup> .....	474	378	205	160
Furnishings and equipment <sup>6</sup> ....	1,169	1,165	525	506
Housing, less other lodging and furnishings and equipment .....	5,407	6,917	3,745	4,933
Income before taxes .....	32,201	34,179	17,756	19,574
Housing as a percent of income <sup>7</sup> ..	22	25	25	29
Housing as a percent of income (not including other lodging or furniture and equipment) <sup>8</sup> .....	17	20	21	25

<sup>1</sup> Does not include reduction of principal.

<sup>2</sup> Includes repairs, insurance, and other related expenses.

<sup>3</sup> Includes natural gas, electricity, fuel oil and other fuel, telephone, water, and other public services.

<sup>4</sup> Includes domestic services and other household expenses.

<sup>5</sup> Includes rental of hotel and motel rooms, expenses for vacation homes, and housing for someone at school.

<sup>6</sup> Includes household textiles, floor coverings, appliances, and miscellaneous housewares.

<sup>7</sup> Mean housing expenditure as a percentage of mean income before taxes.

<sup>8</sup> Mean housing expenditure (not including "other lodging or furnishings and equipment") as a percentage of mean income before taxes.

collection, and mortgage. According to the AHS (7), annual housing costs in 1983 for owners paying a mortgage were \$5,556; for owners without a mortgage, \$1,992; and for renters, \$3,780.

### DISCRIMINATION AGAINST CHILDREN

One barrier to securing suitable, affordable rental housing that some families have experienced is discrimination. A 1980 study (3) found that one in four rental units were located in buildings that exclude families with children, compared with one in six in 1975. Efficiencies and one-bedroom units were more likely to be affected by no-children policies than were units of two or more bedrooms. The study also found that one-fourth of renters without children preferred to live in all-adult buildings. According to apartment managers, the largest problem in renting to families with children was the increased maintenance costs. Because of these restrictive rental practices, 40% of the families in the 1980 study had been frustrated in their search for rental housing and had settled for less desirable housing units or locations than they would have chosen otherwise.

### HOMELESS FAMILIES WITH CHILDREN

Although homeless families are not accounted for in the CES data, they are a growing concern in this country. An alarming number of families with children are now found among the ranks of the homeless, and this number appears to be increasing. In Boston, families make up 40% of the homeless (1). New York City has an estimated 4,400 homeless families, which the city houses in hotels and shelters (2). A recent survey (1) of 25 cities shows that in 1985 demand for emergency shelter increased by 25% in nearly 90% of the cities. Also, in 60% of the cities, emergency shelters could not accommodate everyone seeking assistance, and families in need were routinely turned away.

Families may become homeless because of eviction, nonpayment of rent, dangerous housing, fire or other disaster, or because

they are victims of domestic violence. Homeless families are usually headed by a single, unemployed female who dropped out of high school and has two or three children. Unemployment is often the critical incident in beginning the cycle of homelessness. Homelessness is not confined to big cities; one of the largest groups of homeless families with children are migrant farm workers.

Often homeless families have multiproblems in addition to housing. For example, the majority of homeless children were found to have serious emotional problems that were not characteristic of other poor children (1). Homeless children seldom receive routine health care. Infants and young children do not adapt well to temperature extremes; consequently, there is a high risk for thermal injury among homeless children.

The challenge for many cities is to find appropriate ways of housing families in need of emergency shelter without provoking a flood of applicants. Providing hotel rooms and shelters for homeless families is extremely costly. In New York City the cost of putting up a family of four can run between \$5,000 and \$6,000 a month (2). Although homeless individuals have been the subject of much notice since the early seventies, little research exists on homeless families. Better counts of homeless families are needed to provide useful policy guidelines. The task of getting homeless families off the streets, out of shelters, and into private housing is not an easy one.

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## Employment and Wage Changes of Families in CES Surveys<sup>1</sup>

Market employment rates<sup>2</sup> and wage changes experienced by households<sup>3</sup> in the 1972 and 1980 Consumer Expenditure Interview Surveys were compared in a study from the U.S. Bureau of Labor Statistics (BLS). Households comprising a husband, wife, and children (if any) were grouped by race (white, nonwhite) and household type (age of children).

Employment rates for full-time (35 hours or more per week) and part-time work were reported separately for husbands and wives. In both the 1972 and 1980 samples, most husbands (both white and nonwhite) worked full

time; highest rates were reported by husbands in young families (oldest child under 6 years old) and middle families (oldest child, 6-17 years old). Compared with the 1972 sample, more wives were working in 1980 in all family categories, except older (oldest child over 17 years) white families. Greatest increases in the proportion of working wives were in the young and middle family types of both racial groups, that is, those families with greater household responsibilities.

An index of wage changes from 1972 to 1980 was constructed using Current Population Survey data on weekly earnings of full-time workers. Wage increases were high among farm workers, above average for blue-collar workers, average in white-collar occupations, and low for service employees. In both the 1972 and 1980 samples, most of the working husbands (except for those in white families with no children) were employed in blue-collar occupations with above-average wage increases. Wives tended to work in white-collar (average wage increases) and service (low increases) occupations in 1972. In 1980, however, more wives reported working in blue-collar jobs than in service occupations.

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Source: Kokoski, Mary F., 1987, Employment and wage changes of families from CE survey data, Monthly Labor Review 110(2):31-33.

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<sup>1</sup> Consumer Expenditure Survey: Interview Surveys, 1972-73 and 1980-81, U.S. Department of Labor, Bureau of Labor Statistics.

<sup>2</sup> Market employment rates do not correspond to the official BLS statistical series on labor force participation, but are the proportion of total sample households in the given demographic group and sample year.

<sup>3</sup> The study was limited to renter households and households in which neither husband nor wife was retired or over age 60. Data on owner estimates of the rental value of their residences were not available for the 1980 sample.

# Calcium: Food Sources and Costs

By Dianne D. Odland, *Home economist*  
Patricia M. Behlen, *Nutritionist*<sup>1</sup>  
Nutrition Education Division  
Human Nutrition Information Service

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Recently, considerable attention has focused on the importance of calcium in the diet. It has been reported that the diets of about two-thirds of the U.S. population do not meet the Recommended Dietary Allowance (RDA) for calcium (8). (See table 1 for calcium RDA's.) Because of low dietary intakes of calcium in the United States especially among women, and because of the possible association of low intake with osteoporosis in elderly women, calcium is considered a nutrition monitoring priority (8).

Calcium can be obtained in the diet from a variety of milk and milk products as well as from other foods such as dark green leafy vegetables, tofu processed with calcium sulfate, fish with edible bones, and some enriched or fortified breads and cereals. The relative economy of foods as calcium sources varies greatly, and careful selection can result in money saved. The primary objective of this study was to show how the costs of foods providing equal amounts of calcium differ. Cost per serving of food as sources of calcium, related nutritional concerns such as fat and sodium content, and the use and cost of calcium supplements also are discussed.

## PROCEDURES

Prices of food sources of calcium were obtained in September of 1986 in three Washington, DC, area supermarkets--one national and two local chains. Based on sales volume data collected from May 1985 through April 1986, these chain supermarkets represented over 81% of sales in the Washington

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<sup>1</sup>Formerly with Human Nutrition Information Service, U.S. Department of Agriculture.

metropolitan area (2).<sup>2</sup> The following guidelines were used in selecting items to be priced:

- Excluding items available at "special" prices.
- Choosing medium-size containers.
- Recording the price for the brand having the lowest unit price when more than one brand of a product was available.

Prices for each food were averaged for use in this study. The cost of whole milk is included in the costs of products to which milk is added during home preparation (canned soups, pudding mix, and so forth). Nutrient values of foods were obtained primarily from the data base used in USDA's 1985 Continuing Survey of Food Intakes by Individuals.

For the purpose of this article, the cost of calcium from a product is assumed to be a function of both price and calcium content even though most foods contain other nutrient components of value in the diet. To identify the most economical food sources of calcium, food costs per 100 mg calcium were computed. Also, cost per serving for all foods was determined.

## ECONOMICAL FOOD SOURCES OF CALCIUM

The costs per 100 mg calcium for a variety of foods, ranked from least to most costly within each food category, are listed in table 2, pp. 8-9. Calcium content and cost per serving also are provided (see discussion on p. 11, "Planning Calcium Intake").

### Milk and Milk Products

The calcium content of milks and yogurts may vary considerably with the addition of nonfat milk solids. For example, a cup of low-fat milk can range in calcium from 297 mg (no added solids) to 352 mg (not less than 10% milk-derived solids). Milk with

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<sup>2</sup>Costs reported in this study do not represent those throughout the country. Prices vary by region of the United States, among cities, and among supermarkets within the same city. Procedures for calculating costs in other localities are given in the "note" to table 2.

**Table 1. Recommended dietary allowances for calcium**

Person	Age	Calcium per day (mg)
Infants .....	0.0-0.5	360
Infants .....	0.5-1.0	540
Children .....	1-10	800
Males and females ...	11-18	1200
Males and females ...	19-51+	800
Pregnant or lactating .....	--	+400

Note: The U.S. Recommended Dietary Allowance for calcium used in nutrition labeling of food products is 1000 mg.

Source: National Academy of Sciences, National Research Council, Food and Nutrition Board, 1980, Recommended Dietary Allowances, 9th edition.

nonfat solids added is a better buy for calcium than milk without solids if prices of the two milks are about the same. Nutrition labels on products can be used to compare percentages of the U.S. RDA for calcium provided in a serving.

Among dairy products, milks--including nonfat dry, skim, low-fat, buttermilk, and whole milk--generally provide the most calcium at the least cost. Compared to these milks, some processed milks (canned, and aseptically packaged ultra-high temperature--UHT) cost 1-1/2 to over 2 times as much per 100 mg calcium.

Lactose-reduced low-fat milk and lactose-reduced low-fat milk fortified with calcium phosphate are products designed for those who have difficulty digesting milk because they lack sufficient lactase--an enzyme that breaks down milk sugar (lactose). As sources of calcium, lactose-reduced milks cost slightly more than most other milks but considerably less than most milk products studied.

To provide an equal amount of calcium in the diet, the costs of various cheeses range from 2 to 12 times as much as that of the most economical forms of milk. Cottage cheese and cream cheese were two of the most expensive sources of calcium included in this study.

Yogurt also was more costly than milk per 100 mg calcium. Frozen yogurt cost nearly twice as much as ice cream or ice milk to supply the same amount of calcium.

#### Milk-Based Foods

Milk-based foods can make worthwhile contributions to calcium intake--soups, custard, pudding, cocoa, macaroni and cheese, and pizza, for example. Among the soups evaluated, canned Cheddar cheese soup prepared with whole milk cost the least to provide 100 mg calcium, and New England clam chowder and oyster stew prepared with whole milk cost about twice as much as other soups studied per 100 mg calcium. Pudding and custard made from mixes had about the same cost per 100 mg calcium as ice cream or ice milk. Frozen cheese pizza cost about twice as much per 100 mg calcium as did macaroni and cheese made from a mix.

#### Other Food Sources of Calcium

Although milk and milk products are the major source of calcium for most Americans, other food groups also contribute significant amounts of calcium in most diets. For example, grain and vegetable products are important contributors to women's calcium intakes (1). Although the phytate, oxalate, and fiber content in some of these foods reduces absorption of calcium, the effects appear to be of little nutritional significance in American diets (4).

Other food sources of calcium considered here include vegetables such as tofu (soybean curd) processed with calcium sulfate, and dark leafy greens; fish with edible bones; and some enriched or fortified breads and cereals. These foods generally cost more per 100 mg calcium than most milks. Exceptions are noted below.

Tofu processed with calcium sulfate is a very economical source of calcium. The cost of frozen leafy green vegetables averaged about one-half as much as fresh greens per 100 mg calcium. However, because seasonality can affect the price of fresh produce, relative costs of fresh and frozen forms could vary throughout the year. Broccoli (fresh or frozen) was substantially more costly per 100 mg calcium than dark leafy greens. In fact, broccoli was the least economical food source of calcium in this study.



Table 2. *Cost of foods as sources of calcium*

Food	Cost per 100 mg calcium <sup>1</sup> (cents)	Per serving--		
		Serving size <sup>2</sup>	Calcium (mg)	Cost (cents)
MILK:				
Dry, nonfat, reconstituted .....	4	1 cup	285	10
Skim .....	4	1 cup	302	12
Low-fat (2%) <sup>3</sup> .....	4	1 cup	313	12
Buttermilk .....	4	1 cup	285	12
Whole .....	4	1 cup	291	13
Calcium-fortified, lactose-reduced, low-fat (1%) .....	5	1 cup	500	25
Evaporated, whole, diluted .....	6	1 cup	331	18
Evaporated, skim, diluted .....	6	1 cup	371	21
Lactose-reduced, low-fat (1%) .....	8	1 cup	300	22
Ultra-high temperature (UHT) .....	9	1 cup	291	26
MILK PRODUCTS:				
Cheese, natural, swiss .....	7	1 oz	269	19
Cheese, natural, Cheddar .....	8	1 oz	202	16
Cheese, mozzarella, low-moisture, part skim .....	8	1 oz	205	17
Cheese spread, process .....	9	1 tbsp	84	7
Cheese, American, process .....	9	1 slice	129	12
Cheese food, process .....	9	1 slice	121	11
Cheese, Parmesan, grated .....	10	1 tbsp	69	7
Yogurt, plain, low-fat <sup>3</sup> .....	11	8-oz container	415	46
Cream, half-and-half .....	12	1 tbsp	16	2
Cheese, ricotta, low-fat, part skim milk .....	14	1/2 cup	337	47
Yogurt, low-fat, fruit <sup>3</sup> .....	14	8-oz container	345	50
Ice milk .....	14	1/2 cup	90	12
Ice cream .....	14	1/2 cup	87	12
Cream, sour .....	21	2 tbsp	34	7
Cheese, natural, blue .....	23	1 oz	148	34
Yogurt, frozen .....	25	8-oz container	304	76
Cream, table (light) .....	26	1 tbsp	14	4
Cheese, cottage, low-fat (1%) .....	36	1/2 cup	69	24
Cheese, cottage, creamed .....	36	1/2 cup	63	23
Cheese, cream .....	50	1 tbsp	12	11
MILK-BASED FOODS:				
Canned soups: <sup>4</sup>				
Cheddar cheese .....	11	1 cup	289	32
Chicken, mushroom, potato, tomato (average of) .....	14	1 cup	171	25
New England clam chowder, oyster stew (average of) .....	26	1 cup	175	46

See footnotes at end of table.



Table 2. *Cost of foods as sources of calcium*--Continued

Food	Cost per 100 mg calcium <sup>1</sup> (cents)	Per serving--		
		Serving size <sup>2</sup>	Calcium (mg)	Cost (cents)
<b>MILK-BASED FOODS: (cont.)</b>				
Custard from mix <sup>4</sup> .....	13	1/2 cup	194	25
Pudding from mix <sup>4</sup> .....	14	1/2 cup	133	18
Hot cocoa from mix.....	14	1 pkt with water added	97	14
Macaroni and cheese from mix <sup>5</sup> .....	14	3/4 cup	80	11
Cheese pizza.....	26	1/8 of 12-in frozen	148	39
<b>VEGETABLES:</b>				
Tofu (with calcium sulfate).....	6	1/2 cup	322	21
Leafy greens (frozen) <sup>6</sup> .....	16	1/2 cup	122	18
Leafy greens (fresh) <sup>7</sup> .....	30	1/2 cup	73	20
Broccoli (frozen).....	54	1/2 cup	47	26
Broccoli (fresh).....	74	1/2 cup	37	28
<b>CANNED FISH WITH BONE:</b>				
Mackerel.....	8	3 oz	263	20
Sardines.....	15	3 oz	371	56
Pink salmon.....	30	3 oz	191	57
<b>GRAIN PRODUCTS:</b>				
Calcium-fortified bread.....	4	1 slice	150	5
Enriched white bread.....	6	1 slice	31	2
Ready-to-eat cereal fortified with calcium.....	8	1 cup	242	19
Instant fortified oatmeal.....	10	1 pkt	162	17
English muffin.....	10	half	47	10
Ready-to-eat cereals <sup>8</sup> .....	14-38	( <sup>9</sup> )	88-154	17-40
Dinner roll.....	31	one	28	9

<sup>1</sup>Based on unrounded cost per serving.

<sup>2</sup>Serving sizes are based on those used in national studies of food consumption.

<sup>3</sup>Nonfat milk solids added.

<sup>4</sup>Prepared with whole milk.

<sup>5</sup>Prepared with whole milk and margarine.

<sup>6</sup>Average of spinach, kale, mustard greens, turnip greens, and collards. Calcium per serving ranges from 75 mg for mustard greens to 179 mg for collards.

<sup>7</sup>Average of spinach, kale, and collards. Calcium per serving ranges from 47 mg for kale to 122 mg for spinach.

<sup>8</sup>Selected cereals relatively high in calcium but not calcium fortified.

<sup>9</sup>Serving size varies according to type.

Note: Costs are based on prices of least costly brands from 3 Washington, DC, area supermarkets, September 1986. Cost comparisons per serving for other localities may be determined as follows: Using serving sizes specified above, determine number of servings per market unit, then divide cost per market unit by number of servings. Cost comparisons per 100 mg calcium may be determined as follows: Divide cost per serving by calcium (mg) per serving, then multiply by 100.

Of the three fish sources of calcium that were evaluated, canned mackerel was least expensive per 100 mg calcium. Pink salmon with edible bones cost nearly four times as much to furnish this amount of calcium.

Noteworthy among economical sources of calcium were calcium-fortified bread and enriched white bread<sup>3</sup> (4 and 6 cents per 100 mg calcium, respectively). These products rank with milk as "best buys" in calcium.

Cereals vary widely in calcium content. (This information is readily available to consumers in the nutrition panel on cereal boxes.) A ready-to-eat cereal recently introduced to the market<sup>4</sup> that is calcium-fortified and multivitamin and iron supplemented, and instant fortified oatmeal were relatively economical sources of calcium--both cost less per 100 mg calcium than the other cereals included in this study.

Calcium fortification of grain products is not limited to breads and breakfast cereals. Some producers have also added calcium to all-purpose flour.

## CALCIUM IN SUPPLEMENTS

A wide selection of calcium supplements is available, and demand for them is increasing. The sale of calcium tablets was expected to rise 33% in 1986 from 1985, which in turn was 50% higher than in 1984 (3). Calcium supplements vary by the calcium compound they contain (for example, calcium carbonate, calcium phosphate, calcium lactate, or calcium gluconate), dose per tablet, and number of tablets per bottle. Some calcium supplements also contain vitamins and other minerals.

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<sup>3</sup> About 61% of enriched white bread and 35% of wheat bread (made with enriched white and whole-wheat flour) contain calcium at a level meeting the requirements for calcium enrichment of breads, rolls, and buns--600 mg calcium per pound or about 33 mg per 25-gram slice bread (6, 9). Whole-wheat (made with 100% whole-wheat flour) and multigrain breads are calcium enriched to a lesser extent (6).

<sup>4</sup> Prices collected November 1986.

To compare the cost of supplements with the cost of foods as sources of calcium, prices of 18 different calcium supplements were collected. Both store and pharmaceutical name brands<sup>5</sup> were included. All supplements were lower in cost than nonfat dry milk per 100 mg elemental calcium.

Supplements, however, do not substitute for food. No supplement assures the variety and amounts of nutrients and energy provided by foods in a varied diet. For example, milk and milk products are not only the major source of calcium in our diets, they also provide protein, riboflavin, vitamin B<sub>12</sub>, vitamin A, thiamin, and if fortified, vitamin D. Foods such as leafy greens provide vitamin A, ascorbic acid, riboflavin, folic acid, iron, magnesium, and potassium, in addition to calcium.

Large doses of any nutrient supplement should be avoided (7). Calcium supplements may not be appropriate for all; anyone with a history of kidney stones should consult a physician before taking them (5).

## OTHER NUTRITIONAL CONCERNS

The "Dietary Guidelines for Americans," issued by the U.S. Departments of Agriculture and Health and Human Services, recommend that Americans eat a variety of foods to assure adequate nutrient intake and to provide the appropriate amount of energy to maintain desirable weight. In addition, it is important to avoid too much fat, saturated fat, cholesterol, sodium, sugar, and alcohol, and to eat foods with adequate starch and fiber (7). These recommendations should be considered along with food cost in making food purchase decisions.

Some food sources of calcium are relatively high in calories, fat, and/or sodium. However, there are many alternative food choices available, and specific foods that are high in fat, calories, and sodium can be balanced with others that are lower. Calcium, energy, fat, and sodium values per

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<sup>5</sup> Calcium-rich antacids, bone meal, and supplements containing additional minerals and vitamins were not included.

serving are shown for selected products in the figure on pp. 12-13. Similar foods are grouped together, using similar serving sizes within each group to aid in selecting alternative sources of calcium. Within each group, products are ranked according to their calcium content, with those higher in calcium listed first.

Some considerations in selecting foods as sources of calcium are as follows:

### **Milk and Milk Products**

- Some of the most economical sources of calcium among milk and milk products are also lowest in fat--nonfat dry, skim, and low-fat milk, for example. These products provide more calcium for their calories than most other foods included in this study. Milks lower in fat may be used in place of whole milk for drinking, and to moderate fat in food preparation (for example, to reconstitute canned soups or to make pudding, custard, or macaroni and cheese).

- Just 1-2/3 cups of calcium-fortified lactose-reduced milk provide an adult's RDA for calcium. The product is low in fat and reasonable in cost.

- Low-moisture, part skim mozzarella is a relatively low-cost cheese that provides more calcium for its calories with less fat and sodium than most other cheeses.

- Among cheeses, low-fat cottage cheese offers a low-fat alternative but is higher in cost and is lower in calcium relative to calories than many other milk products. On a per serving basis, it is higher in sodium than all other dairy products considered.

- In addition to being one of the most costly sources of calcium in this study, cream cheese has the least calcium for its calories. It would take about 14 ounces of cream cheese (136 g fat) to equal the calcium in a cup of 2% low-fat milk (less than 5 g fat).

- Plain low-fat yogurt contains more calcium but about the same level of calories, fat, and sodium per serving as low-fat milk. Low-fat fruit yogurt is similar in fat and sodium to plain low-fat yogurt but is a more costly source of calcium and is substantially higher in calories because of added sugar.

- Though ice milk and ice cream were similar in cost and calcium content, ice milk provides about 4 g less fat per serving and only two-thirds the calories of ice cream. Compared to ice milk, pudding and custard made from mix are higher in fat and calories; moreover, they contain about five times as much sodium. Using skim milk in place of whole to prepare pudding and custard saves nearly 4 g of fat per serving.

### **Other Foods**

- Compared to milk, canned soups reconstituted with milk have less than half the calcium for their calories, yet cost over twice as much per serving. Canned soups are relatively high in sodium and some are also high in fat. Preparing soup with skim milk rather than whole saves about 4 g fat per serving.

- Though macaroni and cheese made from mix is moderate in cost per 100 mg calcium, it is high in fat--13 g per serving. Because of the small amount of milk added to the mix, using skim in place of whole milk results in little reduction of fat--only 1/2 g less per serving.

- Leafy green vegetables provide more calcium for their calories than all other foods studied. Moreover, they are low in calories, fat, and sodium. Frozen greens are moderate in cost per 100 mg calcium.

- Among the three fish sources of calcium included for pricing, the least costly (mackerel) is considerably higher in fat and sodium than the most costly (salmon).

- Enriched white bread and calcium-fortified bread are good buys in calcium and are low in fat. Butter or margarine added as a spread, however, adds 4 g of fat per teaspoon.

### **PLANNING CALCIUM INTAKE**

Though cost of food per 100 mg calcium shows best buys in calcium among food sources, cost per serving is also important in planning economical ways to include calcium in the diet. For example, although low-fat yogurts and ricotta cheese were moderate in cost per 100 mg calcium, on a per serving basis they were among the most expensive milk products--exceeded only by frozen yogurt. It is also useful to compare the amount of calcium provided per serving

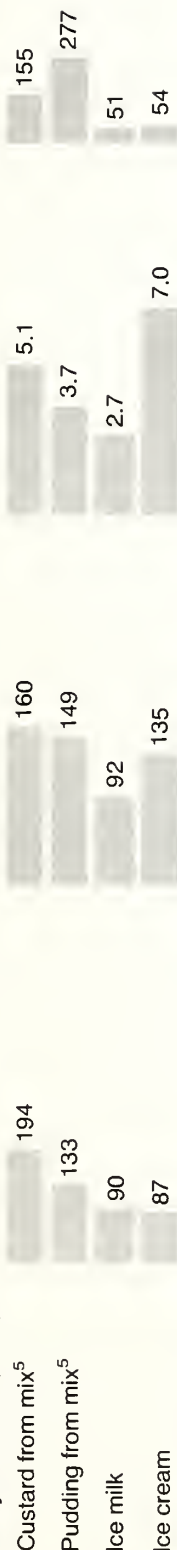


# Calcium, Energy, Fat, and Sodium per Serving in Selected Foods

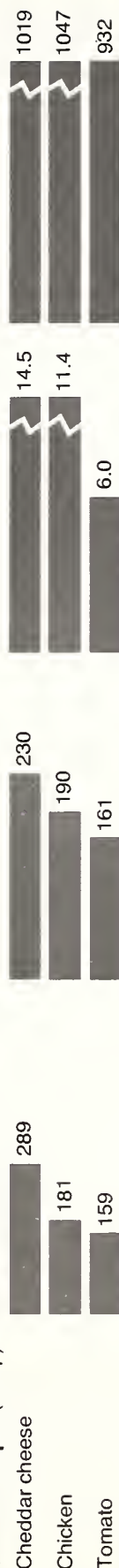
Food	Calcium (mg)	Energy (kcal)	Fat <sup>1</sup> (g)	Sodium <sup>2</sup> (mg)
<b>Milk (1 cup)</b>				
Calcium-fortified (1% fat)	500	100	2.0	125
Low-fat (2%) <sup>3</sup>	313	124	4.7	128
Skim	302	85	0.4	126
Whole	291	149	8.1	120
Nonfat dry	285	81	0.1	131
<b>Cheese</b>				
Natural swiss (1 oz)	269	105	7.6	73
Mozzarella <sup>4</sup> (1 oz)	205	78	4.7	148
Natural Cheddar (1 oz)	202	112	9.2	174
Natural blue (1 oz)	148	98	8.0	391
Process American (1 slice)	129	78	6.5	300
Process cheese food (1 slice)	121	68	5.1	250
Process cheese spread (1 tbsp)	84	43	3.1	202
Cream cheese (1 tbsp)	12	52	5.2	49
Parmesan, grated (1 tbsp)	69	22	1.5	93
Ricotta low-fat (½ cup)	337	171	9.8	155
Low-fat cottage (½ cup)	69	81	1.1	459
Creamed cottage (½ cup)	63	108	4.7	425
<b>Yogurt (1 cup)</b>				
Plain, low-fat <sup>3</sup>	415	143	3.5	159
Fruit, low-fat <sup>3</sup>	345	231	2.4	133
Frozen	304	247	4.5	118



### Dairy desserts (½ cup)



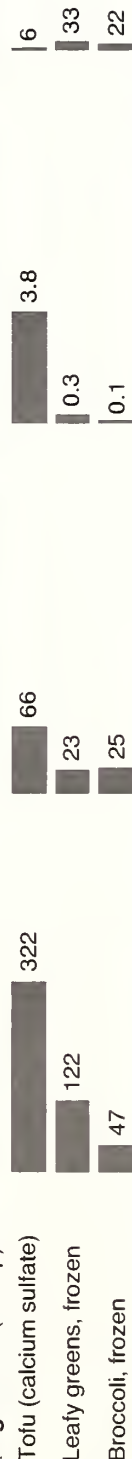
### Canned soups<sup>5</sup> (1 cup)



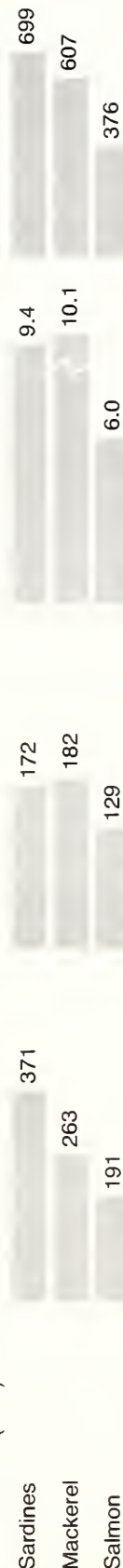
### Mixed dishes



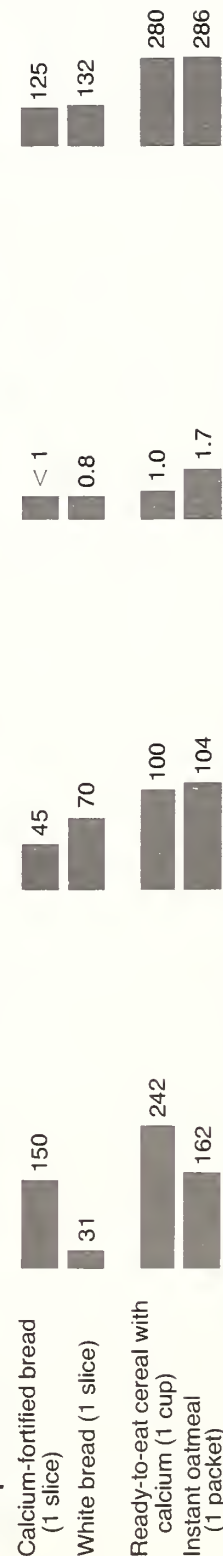
### Vegetables (½ cup)



### Canned fish (3 oz)



### Grain products



<sup>1</sup>Some scientific groups recommend that fat be limited to amounts that will provide no more than 30% to 35% of calories. This allows for roughly 65 to 75 g of fat in the diets of persons consuming about 2000 calories daily.

<sup>2</sup>The National Academy of Sciences estimates 1100 to 3300 mg of sodium to be a "safe and adequate" daily intake for adults.

<sup>3</sup>Non-fat milk solids added.

<sup>4</sup>Low-moisture, part skim milk.

<sup>5</sup>Made according to package directions using whole milk.

of food. For example, it would take nearly 2-1/2 cups of cottage cheese or 4 cups of fresh broccoli to equal the same amount of calcium in a cup of milk.

The cost and calcium per serving information provided in table 2, along with values shown in the figure, can be used to make

practical decisions on how to combine foods at the least cost to obtain the recommended amount of calcium, yet keep fat, calories, and sodium under control.

Following are a few examples of food selections that meet the adult RDA for calcium (800 mg):

	Cost (cents)	Calcium (mg)	Energy (kcal)	Fat (g)	Sodium (mg)
For low cost and minimal fat:					
3 8-oz glasses reconstituted nonfat dry milk					
Total.....	30	855	243	0.3	430
An alternative higher in cost and fat:					
2 8-oz glasses low-fat (2%) milk					
1 oz Cheddar cheese					
Total.....	40	828	360	18.6	430
For greater variety and other nutrients not found in dairy products:					
3 slices white enriched bread					
1 packet instant oatmeal					
1-1/2 cups skim milk					
1/2 cup cooked frozen spinach					
Total.....	62	847	468	4.9	953

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## Nutrient Content of the U.S. Food Supply, 1985

Most nutrient levels estimated from the U.S. food supply were higher in 1985 than in 1984, according to an article published in the National Food Review, Winter-Spring 1987.<sup>1</sup> Major changes in levels and sources of nutrients between 1984 and 1985 and over the past two decades are discussed. Also included is an in-depth report on levels and sources of vitamins in the food supply since 1909-13.

Per capita levels of energy and nutrients provided by the food supply are based on quantities of food available for consumption in the United States and nutrient composition data. These quantities of food are measured at the wholesale/retail level of distribution. Food and nutrient losses occurring after per capita food consumption is measured (such as in further processing, marketing, and home use) are not considered. Therefore, levels of energy and nutrients in the food supply are higher than quantities actually ingested.

From 1984 to 1985, levels of food energy, fat, carbohydrate, vitamin E, and ascorbic acid increased between 3% and 7%. Use of salad and cooking oils accounted for the increase in fat and vitamin E; use of grain products and high-fructose corn syrup (HFCS), for the increase in carbohydrate. Citrus fruits, largely frozen orange juice, provided most of the increase in ascorbic acid. Levels of other nutrients and food components changed 2% or less.

Between 1967-69 and 1985, increases of 10% to 23% occurred in levels of fat and vitamin E because of greater use of salad and cooking oils; in levels of ascorbic acid, from the use of citrus fruits; and in levels of iron, thiamin, and niacin because of revised enrichment standards for white flour. A 37% rise in vitamin A reflected higher vitamin A values for newer varieties

of carrots and sweet potatoes developed after 1969, which have a deeper orange color and more carotene. Over the past two decades, increases ranged between 5% and 9% for food energy, protein, carbohydrate, riboflavin, and vitamin B<sub>6</sub>. Substantially greater use of poultry accounted for the increase in protein and vitamin B<sub>6</sub>; use of HFCS, for the increase in carbohydrate; and the revised enrichment standard for white flour, for the increase in riboflavin. Higher levels of protein, fat, and carbohydrate raised the level of food energy. The 8% decline in cholesterol reflected a decrease in the use of eggs. Decreased use of eggs and meats, especially offals, also contributed to the 5% lower level of vitamin B<sub>12</sub>.

Since 1909-13, changes in the food supply raised vitamin levels. Year-around availability of an assortment of foods and new varieties of vegetables contributed to the higher levels of ascorbic acid and vitamin A. Enrichment of grain products, begun in the forties, was an important factor in the higher levels of thiamin, riboflavin, and niacin. The meat, poultry, and fish group was the largest contributor of niacin and the main source of thiamin until the late forties, when grain products took the lead. Dairy products were the main source of riboflavin throughout the century. Vitamins B<sub>6</sub> and B<sub>12</sub> were provided chiefly by the meat, poultry, and fish group. Fruits and vegetables, including potatoes, were the main sources of ascorbic acid over the years. However, shifts occurred in proportionate contributions. The proportion of ascorbic acid from potatoes was halved, whereas that from citrus fruit quadrupled. Increased use of processed forms of fruits and vegetables, chiefly frozen, was an important factor contributing to the rise of ascorbic acid from fruits and vegetables. Vegetables, particularly dark-green and newer varieties of deep-yellow types, accounted for the gain in vitamin A. Fats and oils were the leading source of vitamin E. Increased use of vegetable oils was responsible for the gain in vitamin E.

<sup>1</sup>Marston, Ruth, and Nancy Raper, 1987, Nutrient content of the U.S. food supply, National Food Review, NFR-36, pp. 18-23, U.S. Department of Agriculture, Economic Research Service.



## Research Summaries

Two studies, conducted as part of a larger USDA-supported project entitled "Economic Consequences of Selected Provisions of the Food and Agricultural Act of 1977," are summarized below.

The States that participated in this regional research project (also known as NC-152) were California, Illinois, Indiana, Iowa, Kansas, Maryland, Michigan, Minnesota, North Dakota, Ohio, Virginia, and Wisconsin.

### FOOD EXPENDITURES IN FOOD STAMP ELIGIBLE HOUSEHOLDS: DIRECT MEASURE AND ADEQUACY MEASURE

A study designed to assess the food adequacy of households receiving food stamps was undertaken at Purdue University.<sup>1</sup> Household food expenditures (FE) were reported in dollars spent per month and as a percentage of the Thrifty Food Plan (TFP).<sup>2</sup> Demographic factors that could influence spending for food were examined.

Data were collected by Agricultural Experiment Stations in California, Indiana, Ohio, and Virginia during the period immediately following implementation of most of the changes in the Food Stamp Programs (including elimination of the purchase requirement) in early 1979. The sample consisted of 889 households who were either participating in the Food Stamp Program or were eligible to participate. Of these households, 45% were rural and 56% were female-headed. The mean household income was \$400 per month; 30% of households reported year-round income.

<sup>1</sup>By Flora L. Williams, Purdue University, West Lafayette, IN.

<sup>2</sup>The U.S. Department of Agriculture's Thrifty Food Plan is used as the standard for determining food stamp benefits. Recipients are given quantities of food stamps based on their income levels, family size, age, and region of the country.

For all households, the mean monthly expenditure for food was \$159, or 37% of household income. FE was found to increase as number of household members, number of children participating in the school lunch program, and total household income increased. Participation in medicare was associated with greater food expenditure, but participation in meals for the elderly reduced food spending. Rural residents spent less for food than urban residents.

Ratios of FE to TFP (FE/TFP) were estimated for all households and separately for food stamp participating households and nonparticipating households. No difference in the FE/TFP for food stamp participants and nonparticipants was found. Results show the average FE/TFP to be 1.06, with a range from 0.52 to over 5.00. About one-half of the households, however, spent within 10% of the TFP.

Those households who benefited from meals for the elderly, help with utility bills, employer-provided health insurance, and food and clothing gifts had lower FE/TFP than did households without these benefits. Low FE/TFP was also found among households with middle-aged heads, an earner who worked year-round, children age 6 to 10, rural households, and large households. As the number of household members increased, the food spending ratio decreased: One-person households spent 131% of TFP, whereas six- or seven-person households spent 80%. This finding has implications for appropriate calculations of both the TFP and the issuance of food stamps.

FE and FE/TFP for all households were found to be a function of money income, income in-kind, demands upon resources, barriers to obtaining food resources, consumer management, and financial pressures. Since no difference in FE/TFP was found between food stamp participants and nonparticipants, it was concluded that TFP is a minimum-adequacy food plan that can be achieved through the use of food stamps.



## DETERMINANTS OF FAMILY HEALTH EXPENSES

A study of family health expenditures was conducted by researchers from Purdue University and Northern Illinois University.<sup>3</sup> The study hypothesized that medical expenses are a function of socioeconomic characteristics, health status, arrangements for financing medical care, and expenditure priorities. Socioeconomic characteristics included annual income; household size; sex, age, and educational level of household head; ethnicity; and residence. Arrangements for financing health care included medicare, medicaid, insurance through employers, self-paid insurance, and no insurance coverage.

The survey sample consisted of 895 households residing in California, Indiana, Ohio, and Virginia who were defined as "low-income" because they were either participating in the Food Stamp Program or were eligible to participate during the interviewing period of 1979-80. Of the survey households, 46% lived in rural areas and 32% consisted of five or more members. Among household heads, 53% were female, 67% were white, 68% were under age 60, and 60% had less than 12 years of schooling; 14% had no medical insurance, 14% participated in medicare, 33% participated in medicaid, 22% had employer-sponsored insurance, and 17% had self-insurance as their primary insurance. Many households participated in more than one insurance program.

The respondents reported spending an average of \$64.71 (7.6% of income) on out-of-pocket medical expenses during a 3-month reporting period. Most of the households (54%) reported out-of-pocket expenses between \$0 and \$96. However, 6% had expenses of \$1,000 or more during the 3-month period. Households in the lowest income bracket (annual income below \$1,000)

spent 27% of their income on out-of-pocket expenses, while those in the highest income bracket (annual income of \$10,000 or more) spent only 3%.

The arrangements used to finance medical expenses affected the amount of out-of-pocket expenses. Medical services for households without public or private insurance are limited by the amount of money available, but findings indicate these households had the highest out-of-pocket medical expenses. Households covered by medicare or medicaid spent less than households with employer- or self-provided insurance.

Other characteristics of households related to spending for out-of-pocket medical expenses included:

**Area of residence.** Farm households and rural nonfarm households spent more than urban households.

**Sex of household head.** Male-headed households spent more than female-headed households.

**Ethnic origin.** White households spent more than black and Mexican-American households.

**Health status.** Households reporting illness spent more than those with no illness.

**Education.** Households with a head who completed college spent more than households whose head had less education.

**Age.** Households with persons over age 60 spent more than younger households.

**Priority of medical bills in the budget.** Households that gave medical bills high priority spent more than those that gave them low priority.

Household size was not related to out-of-pocket medical expenditures.

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<sup>3</sup> By Flora L. Williams, Amy Hagler, and Marshall A. Martin, Purdue University, West Lafayette, IN; and Mary Pritchard, Northern Illinois University, De Kalb, IL.

# Food Stamp Program

The Food Stamp Program was created to improve the levels of nutrition among low-income households. It originated from the food assistance programs begun during the Great Depression, when the Federal government began distributing farmers' surplus foods to the country's hungry citizens. By the late thirties, the U.S. Department of Agriculture (USDA) was using a plan wherein families exchanged money for stamps of equal value to purchase regular food items. These families also received additional stamps to buy surplus foods. The plan ended in 1943 when World War II reduced both food surpluses and unemployment. During the midfifties a depressed economy caused renewed interest in food stamps, and some jurisdictions re-established systems for distributing surplus foods to needy people. In 1961, President Kennedy directed USDA to establish a pilot Food Stamp Program. It was established as a permanent program under the Food Stamp Act of 1964, to operate at State option. The program went nationwide in 1974 when Congress required all States to offer food stamps to the poor.

The Food Stamp Program is administered nationally by USDA's Food and Nutrition Service, and locally by State welfare agen-

cies. Qualified households receive monthly benefits to help in purchasing a nutritionally adequate diet. The criteria for participation include the following requirements:

- Able-bodied applicants between 18 and 60 years of age must meet certain work requirements.
- All households may have up to \$2,000 worth of countable resources. Households with one or more people may have up to \$3,000 if at least one member is age 60.
- All household members must provide a Social Security number.
- Only households with net monthly incomes at or below 100% of the poverty line may qualify for food stamps. Households without elderly or disabled members must also have gross incomes at or below 130% of the poverty line.

The value of a household's allotment of food stamps is based on the Thrifty Food Plan<sup>1</sup> for that particular household size and on the household's spendable income. The current maximum monthly allotment levels, effective October 1, 1986, are given in the table below.

<sup>1</sup> U.S. Department of Agriculture, Food and Nutrition Service. For further information on the Thrifty Food Plan, see "USDA 1983 Thrifty Food Plan," Family Economics Review 1984(1):18-25.

*Maximum monthly allotment levels, effective October 1, 1986*

Household size (persons)	48 States and Washington, DC	Urban Alaska	Alaska		Hawaii
			Rural I <sup>1</sup>	Rural II <sup>2</sup>	
1 .....	\$81	\$111	\$140	\$170	\$128
2 .....	149	204	236	312	234
3 .....	214	293	367	447	336
4 .....	271	372	467	568	426
5 .....	322	442	554	675	506
6 .....	387	530	665	810	608
7 .....	428	586	735	895	672
8 .....	489	670	840	1,023	768
Each additional member.	+61	+84	+105	+128	+96

<sup>1</sup> Rural areas that are close to a city.

<sup>2</sup> Rural areas not near a city.

Source: U.S. Department of Agriculture, Food and Nutrition Service, 1986, Food Stamp Program, Governmental Affairs Staff [Alexandria, VA].

The types of firms that can apply for authorization to accept food stamps include retail food stores, wholesalers, meals-on-wheels, communal dining, alcoholic and drug treatment centers, private restaurants,<sup>2</sup> and group living facilities. Food stamps can be used to purchase any food or food product for human consumption, in addition to seeds and plants for use in home gardens to produce food. To avoid unfair competition with fast food restaurants, food stamps cannot be used in food stores to purchase hot foods ready to eat, foods intended to be heated or eaten in a store, and lunch counter items. Food stamps cannot be exchanged for cash, or used to buy alcoholic beverages, tobacco, vitamins or medicines, pet foods, or any nonfood items.

In 1985, children, the elderly, the disabled, and single parents who head households made up over 75% of food stamp recipients (52% children, 7% elderly, 8% disabled, and 14% single parents who head households). As of July 1984, almost 50% of food stamp households were white, 37% black, 11% Hispanic, 1% Asian or Pacific Islander, and 1% American Indian or Alaskan Native.

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<sup>2</sup>No fast food establishments and very few restaurants accept food stamps. In order to receive approval for accepting food stamps, restaurants must be willing to offer low or reduced prices to elderly who qualify for SSI (Supplemental Security Income).

Source: U.S. Department of Agriculture, Food and Nutrition Service, 1986, Food Stamp Program, Governmental Affairs Staff [Alexandria, VA].

## New Publications

The following is for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 783-3238:

. **Composition of Foods: Legumes and Legume Products--Raw, Processed, Prepared.** AH 8-16. December 1986. SN001-000-04488-5. \$8.50.

Single copies of the following are available free from the U.S. Department of Agriculture, Human Nutrition Information Service, Room 325A, 6505 Belcrest Road, Hyattsville, MD 20782:

. **Nationwide Food Consumption Survey: Continuing Survey of Food Intakes by Individuals--Men 19-50 Years, 1 Day, 1985.** November 1986. No. 85-3.

. **Nationwide Food Consumption Survey: Continuing Survey of Food Intakes by Individuals--Women 19-50 Years and Their Children 1-5 Years, 1 Day, 1986.** January 1987. No. 86-1.

\* \* \* \* \*

The following is available from the Consumer Information Center. Write to S. Woods, Department 425R, Consumer Information Center, Pueblo, CO 81009:

. **Buying and Borrowing: Cash in on the Facts.** Winter 1986. 425R. \$0.50.

This booklet from the Federal Trade Commission gives suggestions on establishing credit and solving credit problems, and explains consumers' rights when buying on layaway and credit, cosigning a loan, getting warranty protection, and shopping by mail or phone.



## 1987 CPI Revision

Changes in Americans' spending patterns since 1972-73 are reflected in the latest revision of the Consumer Price Index (CPI) (see box), effective with the January 1987 estimates. The CPI, calculated by the Bureau of Labor Statistics (BLS), U.S. Department of Labor, is a measure of the average change in the price paid by urban consumers for a fixed market basket of goods and services.<sup>1</sup> Periodic revisions of the CPI market basket are necessary to incorporate changes in consumer spending patterns that have occurred over time. The composition and relative weight for each market basket component is derived from expenditure estimates from the ongoing Consumer Expenditure Survey (CES).<sup>2</sup> To more accurately measure changes in the price level for goods and services purchased by consumers in the eighties, the 1987 revision uses data from the 1982-84 CES (the previous revision in 1978 was based on the 1972-73 CES).<sup>3</sup>

### Changes in Consumption Patterns

Many trends noted in earlier revisions of the CPI have continued. The relative importance for the service expenditure classes continued to grow in relation to the commodity expenditure classes, and food declined in relative importance following a trend established almost 50 years ago.

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<sup>1</sup>For detailed information on the construction of the CPI, see BLS Handbook of Methods, Volume II, The Consumer Price Index, Bulletin 2134-2, U.S. Department of Labor, Bureau of Labor Statistics, 1984.

<sup>2</sup>For information on the Survey, see "Spending Patterns of U.S. Households," Family Economics Review 1987(1):26-28.

<sup>3</sup>The collection of expenditures of college students in the CES changed between 1972-73 and 1982-84. Students living in college dormitories are now considered to be separate consumer units, whereas previously they were considered a part of their parents' consumer unit. This change allows for more precise accounting of students' expenses when living outside their parents' home, particularly for "lodging while at school."

Many factors contributed to the changes in expenditures for each component of the CPI market basket between 1972-73 and 1982-84--changes in prices, demographic characteristics of the population, income, and tastes and habits.

### Food

Since the 1972-73 base period, the relative importance for food at home declined but the relative importance of food consumed away from home increased. The rise in the number of two-earner families (from 43.6% of households with both spouses present in 1970, to 59.6% in 1983) coincides with the increase in the number of meals purchased away from home.

Health and nutritional concerns influenced consumption of various food items. Increases occurred for cereals (especially high fiber, low sugar), poultry, and low-fat milk; whereas declines were noted for red meats, whole milk, sugars and sweets, and fats and oils.

Also contributing to lower sugar and sweets consumption was the decreasing number of children over the 10-year period. School lunches--a significant part of lunches away from home--declined in importance, partially offsetting the increase in lunches away from home purchased by employees.

### Housing

The relative importance of the housing component has grown substantially between revisions. This increase is mostly the result of the increase in homeowners' equivalent rent. Homes are larger (5.6 rooms per housing unit in 1970, compared with 5.8 rooms in 1980) and are more likely to be air-conditioned (29.6% in 1970 and 42.9% in 1980).

Consumption of many items may depend on the geographical location of the consumer unit. For example, fuel oil is consumed more heavily in the North and East, both because of cold weather and the ready availability of fuel oil. The shift in population from the North and East to the South and West has had the effect of reducing fuel oil expenditures by 4.9%.



The CPI consists of seven major expenditure groups--food and beverages, housing, apparel and upkeep, transportation, medical care, entertainment, and other goods and services. These are disaggregated into 69 expenditure classes, which in turn are divided into 184 item strata. Periodic CPI revisions permit modifications in the aggregate index structure by (1) combining some detailed indexes into a single item stratum; (2) developing separate indexes for items that had previously been combined with others; or (3) pricing previously unpriced items. Changes of this type help to keep the CPI current and, by pricing an optimal mix of items, help to minimize sampling error for the all-items CPI. Examples of expenditure categories that have been redefined include the following:

- . Food purchases made at grocery stores during trips are now assigned to the expenditure category for food at home, as this food is prepared at the site where the purchaser is staying. A 2.3% increase in food-at-home expenditures and a 3.8% reduction for food away from home resulted from this revision.

- . Lodging away from home now includes an imputed value for owners' personal use of vacation property; this was not included in the former CPI.

- . The market value of trade-ins on purchases of new and used cars is now subtracted from the value of used car purchases. The prerevision method double-counted certain used car values by neglecting to subtract all used car trade-ins from used car purchases, causing the combined value of new and used vehicles to be overstated. The new procedure reduces the total estimated expenditure for the transportation major group by 9.7%.

- . A "professional services" index has been formed that combines eye care (including eyeglasses and contact lenses) with physicians', dental, and other professional services. In the past, the CPI disaggregated the purchase price of eyeglasses and contact lenses (commodities) and the charge associated with the fitting of eyeglasses and contact lenses for the consumer (services). The revised CPI places the total cost in a single index in the medical care service component, resulting in a 12.2% reduction in the medical care commodity component.

- . Services for pets (principally veterinary services) and video rentals are now priced in "other entertainment services." Water sports equipment, previously unpriced, is now included in "other sporting goods."

- . "School textbooks and supplies" has been expanded to include expenditures for elementary school textbooks and supplies, and sets of reference books--both previously unpriced.

The following are examples of new indexes of previously unpriced items:

- . Video cassette recorders and other video equipment.
- . Computers and related information processing equipment.
- . Accounting fees.
- . Cemetery lots and vaults.

These are examples of separate indexes for items previously combined with others:

- . Club memberships.
- . Fees for participant sports.
- . Fees for lessons and instructions.
- . Legal services.
- . Funeral expenses.
- . Personal financial services.

Other areas within the housing group showed large consumption increases. The largest increase (600%) was for cable television service, primarily because of its greater availability across the country.

Prices affected the relative importance of the housefurnishings and housekeeping services components. Whereas consumption of housefurnishings was stimulated by much lower than average price increases, consumption of housekeeping services declined as prices more than doubled between 1972-73 and 1982-84.

### Apparel and Upkeep

The relative importance of the apparel and upkeep category as a whole declined between 1972-73 and 1982-84. Specific items within this major group experiencing consumption decreases included men's suits, coats, sport coats, and jackets; sewing materials and luggage; and apparel services. Contributing to these consumption declines were the trends toward more casual dress for men, growth in two-earner families (decreasing the time available for sewing), and the improvement in easy-care fabrics (reducing the need for drycleaning services).

### Transportation

Both private and public transportation components<sup>4</sup> showed consumption declines. The Arab oil embargo of 1973-74, which sent gasoline prices soaring, radically altered motor fuel consumption. Fuel efficiency standards for new U.S. cars and the gas-saving 55 mph speed limit promoted fuel conservation. Even after the embargo was lifted in March 1974, conservation efforts continued, resulting in increasing sales of smaller, fuel-efficient cars and a reduction in the number of miles driven. These factors created a 23.2% decline in gasoline consumption per consumer unit between 1972-73 and 1982-83.

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<sup>4</sup> Private transportation includes the purchase, ownership, operation, and maintenance costs of vehicles. Public transportation includes expenditures for intercity transportation by air, bus, ship, boat, or train, and intracity travel by subway, bus, vanpool, and taxi.

Consumers have been keeping their vehicles longer--in 1984 the average age of owned vehicles was 7.5 years. This increased longevity could be the result of lower annual mileage, greater durability, less deterioration caused by leaded gas, and less incentive by owners to replace for changes in style. This increase in vehicle age, however, has not translated into increased total expense for automobile maintenance and repair service. The 13% decline in maintenance and repair expenses may be due to improved structural standards, longer recommended service intervals, better protection against corrosion, the 55 mph speed limit, and more do-it-yourself maintenance.

The public transportation category was affected by heavy discounting of airline fares after industry deregulation in 1979. About two-thirds of the relative importance for public transportation consisted of airline fares in 1982-84, compared with one-half in 1972-73.

### Medical Care

The revised relative importance for the medical care category was slightly less in 1982-84 than it was in 1972-73, even though medical care costs have risen rapidly in the past decade (up 141% compared with 116% for all items). This decline results from changes in the way consumers pay for medical care. An increasing proportion of medical costs are paid by employer-financed insurance or government transfer programs. Because the CPI relates only to consumption expenditures, employer- and government-provided benefits are not included.

### Entertainment

Entertainment **commodities** declined between revisions in the CPI. Sporting goods was the only exception, reflecting the increased popularity of health and fitness products. Entertainment **services**, however, has grown 20% since the last CPI revision. Admissions to the cinema, concerts, and sporting events have increased since 1972-73.

## Other Goods and Services

The major group "other goods and services" (which includes personal care, tobacco products, and personal and educational expenses) remained nearly unchanged in relative importance over the decade. However, personal and educational services showed substantial rises since the last revision. The large quantity increase for the "tuition and other school fees" category is a result of the growth in expenditures for day care and nursery schools. The increasing number of dual-earner families and single-parent households has led to the enrollment of 7 million children in some form of day care center. Enrollment in trade schools and colleges also increased.

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Source: Mason, Charles, and Clifford Butler, 1987, New basket of goods and services being priced in revised CPI, Monthly Labor Review 110(1):3-22, U.S. Department of Labor, Bureau of Labor Statistics.

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## Agricultural Outlook Conference '88

The Agricultural Outlook Conference will be held from December 1 to December 3, 1987. The session coordinated by the Family Economics Research Group will feature several speakers from Government agencies and the academic community who will discuss their work in connection with the Consumer Expenditure Survey. This session will be held on Wednesday, December 2.

The Conference is free; preregister by writing to Outlook '88, Room 5143, South Building, Washington, DC 20250. To obtain Conference materials and a building pass, Conference participants are asked to go to the 5th wing bay, 1st floor, in the South Building, 14th Street and Independence Avenue, SW., Washington, DC.

## Poverty Among Blacks in the Nonmetro South<sup>1</sup>

In 1980, almost all (93%) U.S. black families living in nonmetro areas resided in the South. Over 22% of poor black families, compared with 17% of total black families, lived in the nonmetro South. More than 35% of southern nonmetro black families had incomes below the poverty threshold in 1979.<sup>2</sup> Poverty was an even greater problem among those families that were headed by females; 55% had incomes below the poverty threshold. Moreover, of all black or white groups, black female-headed families were most likely to have very low incomes; nearly 43% had incomes below 75% of the poverty threshold. Poverty rates of southern nonmetro blacks in 1979 rivaled those for families in any metropolitan area. Poverty was three times more prevalent among black than among white nonmetro southern residents (table 1). Low income levels in both black and white families were related to low levels of education, young or old age, work disabilities, and child care responsibilities.

Most poor black householders in the nonmetro South have not completed high school, and 82% of poor black "other" householders (married couple or male householders with no wives present) have not graduated. Nearly 30% of poor black "other" householders have not completed 5 years of elementary school. Median years of schooling for female householders was about 2 years greater than that for "other" householders.

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<sup>1</sup> Nonmetro areas are counties outside of a Standard Metropolitan Statistical Area (SMSA). SMSA's include counties containing a city of 50,000 or more people, or a city of 25,000 or more people if the city population plus that of contiguous thickly populated areas equals 50,000 or more.

Data computed from the 1980 Census of Population and Housing, Public Use Microdata Sample B (a 1% population sample), U.S. Department of Commerce, Bureau of the Census.

<sup>2</sup> The poverty threshold varies by size of family. For example, the threshold for a family of four in 1979 was \$7,412.



Poor black "other" householders were twice as likely as those who were nonpoor to be 65 years or older (29% compared with 15%), whereas poor black female householders were younger than those who were nonpoor. More poor than nonpoor black female householders care for preschool children (33% of poor female householders, compared with 11% nonpoor). Having enough money for both day care and supporting the family is a serious problem for female householders who have limited education or who lack the work skills needed to obtain adequate paying jobs.

In 1980, 57% of poor black female householders in the nonmetro South and 49% of poor black "other" householders (including the work-disabled) were not in the labor force. Poor black "other" householders 16 to 64 years old were those most affected by disability; over 15% were prevented from working, compared with 6% of their nonpoor black counterparts.

Nearly 20% of poor black female householders and over 9% of poor black "other" householders in the labor force were unemployed. These are rates well above those of

their nonpoor counterparts (7% and 5%, respectively) and may reflect the low level of skills among poor black householders as well as the scarcity of employment opportunities in their communities. The unemployment rate of poor white female householders (17%) was not much lower than that of poor black female householders. However, because female householders made up one-half of poor black householders, compared with only one-fifth of poor white householders, the unemployment rate for female householders affected overall rates for blacks more than for whites.

Black householders were more likely than white householders to hold lower-wage operator, fabricator, and laborer occupations. A larger percentage of employed white female householders held technical, sales, and administrative-support occupations than did employed black female householders. There was a greater concentration of white than black "other" householders occupying professional and managerial or precision jobs, perhaps due to the higher educational level attained by whites.

**Table 1. Number of families in the nonmetro South, by race, type of householder, and poverty status, 1980**

Family type	All families		Poor families <sup>1</sup>	
	(thousands)	(percent)	(thousands)	(percent)
Total black families .....	1,019.5	100	360.8	35.4
Married couple .....	639.1	100	163.2	25.5
Male householder, no wife present ....	54.9	100	17.8	32.4
Female householder, no husband present .....	325.5	100	179.8	55.2
Total white families .....	5,599.5	100	668.4	11.9
Married couple .....	4,954.1	100	507.2	10.2
Male householder, no wife present ....	143.4	100	22.1	15.4
Female householder, no husband present .....	502.0	100	139.1	27.7

<sup>1</sup> Families with incomes below the poverty threshold are considered poor.

Source: Data computed from the 1980 Census of Population and Housing, Public Use Microdata Sample B, computer tape, U.S. Department of Commerce, Bureau of the Census.



In 1979, adult (age 16 and over) family members other than the householder provided about one-third of the income in poor black families. In poor black female-headed families, 70% of the adult members were between 16 and 24 years old, indicating low levels of marketable skills.

Families with poor female householders received a lower percent of their incomes from earnings than did other families. Poor female householders received about 25% of their income from cash public assistance

programs (such as Aid to Families with Dependent Children). Poor "other" families were more dependent upon Social Security than upon cash public assistance. (The distribution of family income for the nonmetro South in 1979 is shown in table 2.)

Source: Ghelfi, Linda M., 1986, Poverty Among Black Families in the Nonmetro South, Rural Development Research Report No. 62, U.S. Department of Agriculture, Economic Research Service.

**Table 2. Family income in the nonmetro South, by race, type of householder, and poverty status, 1979**

Family type	Female householder		Other householder <sup>1</sup>	
	Poor <sup>2</sup>	Nonpoor	Poor	Nonpoor
Total black families (thousands) .....	179.8	145.7	181.0	513.0
Percent with income--				
Less than \$2,500 .....	36.7	--	22.5	--
\$2,500-\$4,999 .....	38.2	2.9	38.2	1.3
\$5,000-\$7,499 .....	16.6	20.0	22.5	8.7
\$7,500-\$9,999 .....	6.4	20.7	11.2	10.9
\$10,000-\$19,999 .....	2.2	44.4	5.6	48.2
\$20,000-\$29,999 .....	--	8.6	--	21.9
\$30,000 or more .....	--	3.4	--	9.1
Median family income .....	\$3,375	\$10,109	\$4,299	\$15,465
Average family size .....	4.2	3.6	4.4	4.0
Total white families (thousands) .....	139.1	362.9	529.3	4,568.2
Percent with income--				
Less than \$2,500 .....	33.9	--	26.0	--
\$2,500-\$4,999 .....	49.1	1.8	44.7	.8
\$5,000-\$7,499 .....	14.2	17.7	20.5	6.4
\$7,500-\$9,999 .....	2.6	19.9	7.4	8.7
\$10,000-\$19,999 .....	.3	44.2	1.5	39.8
\$20,000-\$29,999 .....	--	11.5	--	27.1
\$30,000 or more .....	--	4.9	--	17.2
Median family income .....	\$3,324	\$11,825	\$3,844	\$18,543
Average family size .....	3.2	2.7	3.5	3.1

<sup>1</sup>Married couple or male with no wife present.

<sup>2</sup>Poor families are those with incomes below the poverty threshold.

Note: -- = No families in this category.

Source: Computed from U.S. Department of Commerce, Bureau of the Census.

## Spending Patterns of Urban and Rural Populations: 1984<sup>1</sup>

U.S. urban consumers have, on average, substantially higher income and expenditure levels than rural consumers, according to results for 1984 from the continuing Consumer Expenditure Survey (CES). This is the first time the rural population has been sampled and analyzed since the current CES program began in 1979. Comparisons of expenditure values<sup>2</sup> reported for urban and rural consumer units<sup>3</sup> identified the following differences:

- Rural householders are, on average, older than urban householders; about 42% of rural householders, compared with 33% of urban, are age 55 or older.
- Rural consumers are more likely than urban consumers to own their homes. Housing expenditures for rural consumers are lower than expenditures for urban consumers, partly because rural homeowners are more likely to have paid off their mortgage.
- The higher percentage of renters among urban consumers is reflected in their higher expenditures for rental costs.

<sup>1</sup> Findings from the Consumer Expenditure Survey: Interview and Diary Surveys, 1984, U.S. Department of Labor, Bureau of Labor Statistics. For additional information on this survey and its two component parts, see "Spending Patterns of U.S. Households," Family Economics Review 1987(1):26-28.

<sup>2</sup> All sales and excise taxes are included in CES expenditure values for items purchased by the consumer unit for itself or for others. Business-related expenses for which the consumer unit is reimbursed are excluded from the Interview and Diary Surveys.

<sup>3</sup> The basic reporting unit for the CES is the consumer unit that refers to a single person or group of persons in a sample household related by blood, marriage, adoption, or other legal arrangement, or who share responsibility for at least two of three major types of expenses--food, housing, and other expenses. The term household is used for convenience.

• Comparable amounts are spent for food at home by urban and rural consumers, except for fruits and vegetables. Urban consumers spend 24% more than rural consumers for fresh and processed fruits and vegetables.

• Urban consumers spend more of their food budget on food away from home than do rural consumers (36% compared with 29%).

• Urban consumers spend one-third more than rural consumers on personal care products and services.

• Urban consumers report higher expenditure levels than rural consumers for gasoline and motor oil, health care, tobacco, and life and other personal insurance.

Annual expenditure values for urban and rural populations for selected expenditure categories are shown in the table.

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Source: U.S. Department of Labor, Bureau of Labor Statistics, 1986, Consumer Expenditure Survey, 1984 Results for Both Urban and Rural Populations, News USDL: 86-451.

### NEW RELEASES ON THE CES

The 1984 Interview microdata tape is now available with machine-readable format. New features found in this public-use tape include summary data, additional variables, data on household inventory of major household appliances and vehicles, travel information, the new weighting procedure, and information on rural consumers. The 1984 Diary microdata tape is also available to the public. A News release for 1985 data for the total population is scheduled to be published later in 1987. For information on ordering tapes, call (202) 272-5060. For free single copies of News reports or for inquiries about survey results, write to the Office of Prices, Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC 20212.

*Selected characteristics and average annual expenditures of urban and rural consumer units, 1984<sup>1</sup>*

Item	All consumer units	Urban	Rural
Number of consumer units (thousands).....	90,223	75,172	15,050
Consumer unit characteristics:			
Income before taxes (dollars).....	23,457	24,410	18,681
Size of consumer unit .....	2.6	2.6	2.8
Age of reference person (years) <sup>2</sup> .....	46.7	46.2	49.1
Number in consumer unit:			
Earners .....	1.4	1.4	1.4
Vehicles .....	1.9	1.8	2.2
Children under 18 .....	.7	.7	.8
Persons 65 and over.....	.3	.3	.4
Housing tenure (percent):			
Homeowner with mortgage.....	38	38	35
Homeowner without mortgage.....	25	21	42
Renter .....	38	41	23
Average annual expenditures (dollars).....	20,862	21,612	17,115
Food .....	3,280	3,369	2,837
At home.....	2,300	2,325	2,176
Away from home.....	980	1,044	661
Alcoholic beverages .....	286	301	215
Housing .....	6,284	6,573	4,837
Shelter.....	3,494	3,729	2,324
Owned dwellings.....	2,066	2,151	1,645
Rented dwellings .....	1,071	1,194	460
Other lodging .....	357	384	220
Utilities, fuels, and public services .....	1,638	1,660	1,529
Household operations .....	315	328	247
Housefurnishings and equipment.....	837	857	737
Apparel and services .....	1,107	1,183	728
Transportation .....	4,263	4,351	3,826
Vehicles .....	1,813	1,860	1,577
Gasoline and motor oil.....	1,058	1,034	1,175
Other vehicle expenses .....	1,137	1,166	994
Public transportation .....	255	291	79
Health care .....	902	891	959
Entertainment .....	973	1,026	706
Personal care .....	193	203	138
Reading .....	132	139	95
Education .....	286	314	148
Tobacco .....	227	224	244
Miscellaneous .....	295	308	229
Cash contributions .....	706	730	584
Personal insurance and pensions.....	1,928	2,000	1,569
Life and other personal insurance .....	300	296	316
Retirement, pensions, and Social Security .....	1,628	1,704	1,253

<sup>1</sup> Data from the Consumer Expenditure Survey (CES), Interview Survey, 1984. The basic reporting unit for the CES is the consumer unit that refers to a single person or group of persons in a sample household related by blood, marriage, adoption, or other legal arrangement, or who share responsibility for at least 2 of 3 major types of expenses--food, housing, and other expenses. The term household is used for convenience.

<sup>2</sup> Reference person or householder is the first person named by the respondent as owning or renting the home.

Source: U.S. Department of Labor, Bureau of Labor Statistics, 1986, Consumer Expenditure Survey, 1984 Results for Both Urban and Rural Populations, News USDL: 86-451.

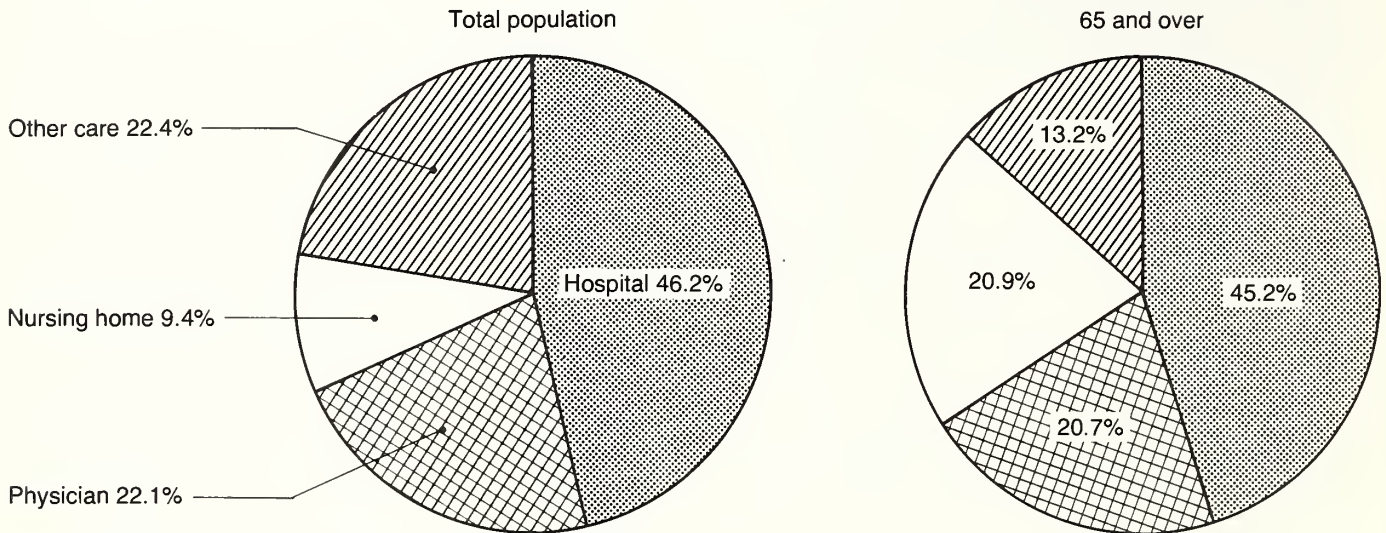


# Some New USDA Charts

Chart 165

## Personal Health Care Expenditures by Age

Compared to the general population, the elderly spent a smaller share of their health care dollar on dentists' services, prescription drugs, and vision aids (other care) in 1984.

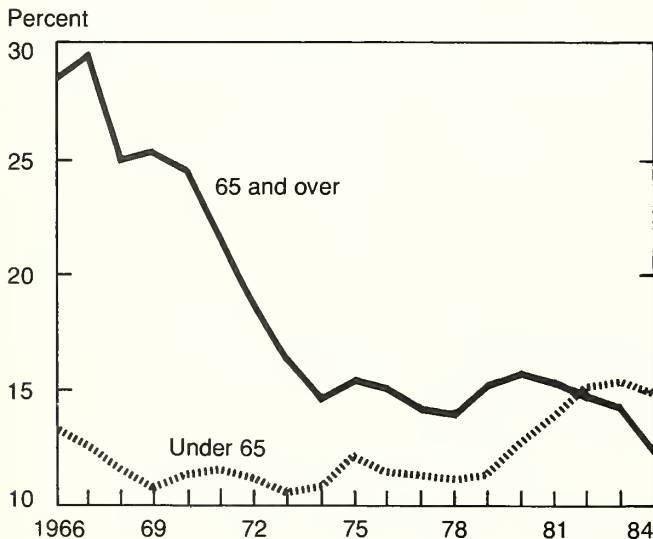


1984 data. Source: Health Care Financing Administration.

Chart 166

## Poverty Rates by Age

Double-digit inflation and falling real income during 1979-82 led to higher poverty rates for persons under 65 than for the elderly.

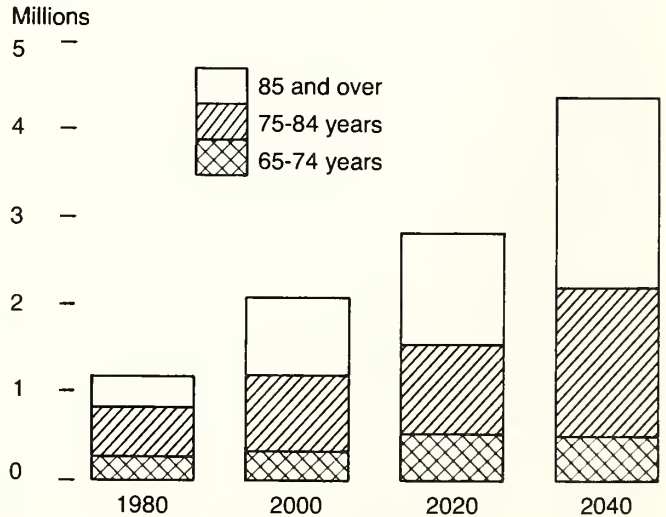


Source: Bureau of the Census.

Chart 167

## Nursing Home Population Projections

The number of elderly residing in nursing homes should triple by 2040. Their median age is expected to rise as 50 percent become 85 and over in 2040.



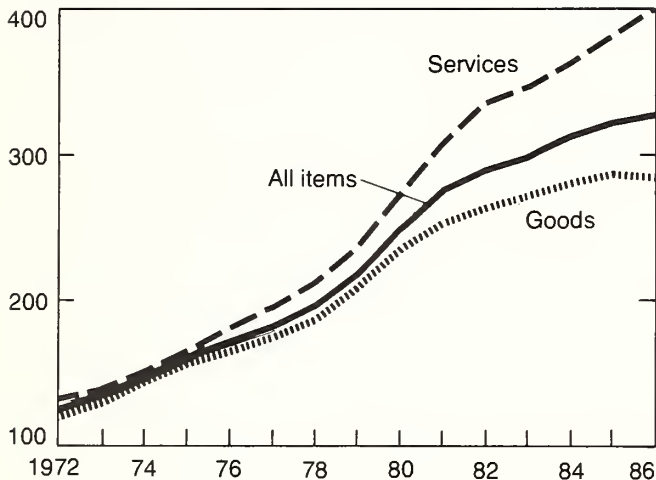
Sources: Bureau of the Census and the 1977 National Nursing Home Survey, National Center for Health Statistics.

Chart 175

### Changes in Consumer Prices for Goods and Services

Prices for services continued to increase to an annual rate of about 5 percent in 1985. Prices for goods increased only 2 percent in 1985 and decreased slightly by mid-1986.

% of 1967



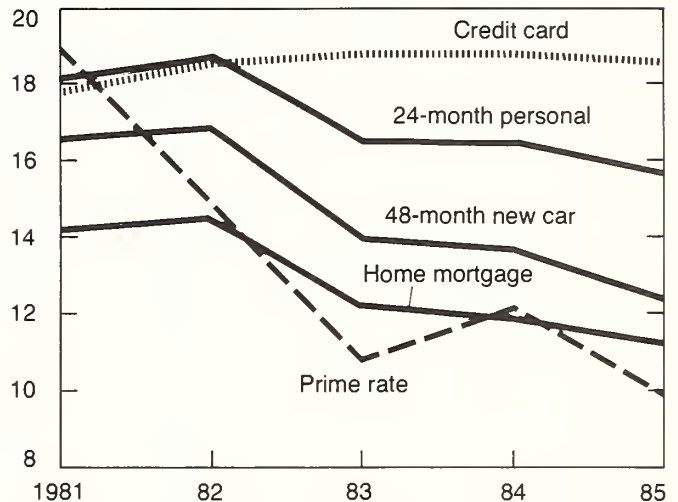
Annual averages 1972-85; June data for 1986. Source: Bureau of Labor Statistics.

Chart 176

### Loan Rates

Except for credit card rates, consumer loan rates have fallen since 1982. Prime rate, charged by banks on most short-term business loans, dropped by 18 percent from 1984 levels.

Percent



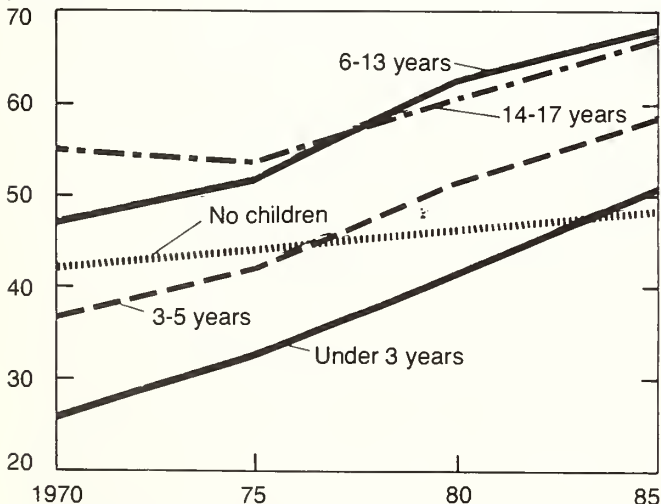
Annual averages. Source: Federal Reserve Bulletin.

Chart 171

### Wives' Labor Force Participation Rates by Age of Youngest Child

Labor force participation rate for wives with children under 3 doubled during 1970-85, and was higher in 1985 than that for wives with no children.

Percent



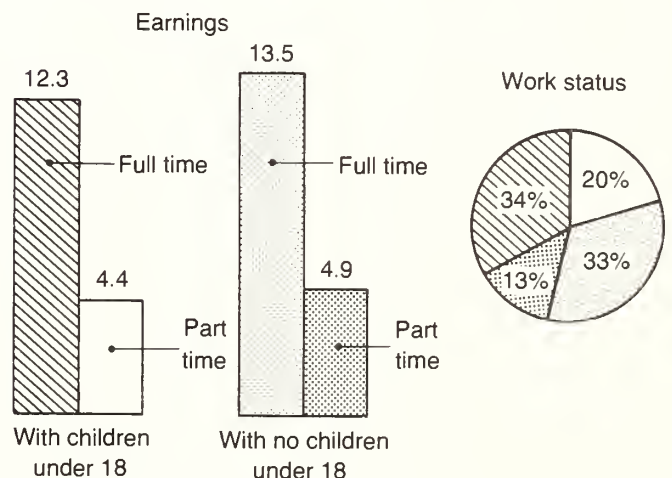
Husband present. Source: Bureau of Labor Statistics.

Chart 169

### Earnings and Work Status of Wives in the Labor Force

In 1983, over half of wives with earnings had children under 18. The earnings of these wives were only slightly lower than those of wives with no children.

\$ thousand



1983 data. Average annual earnings; excludes wives with no 1983 earnings. Source: Bureau of the Census.

# Cost of Food at Home

Cost of food at home estimated for food plans at 4 cost levels, May 1987, U.S. average<sup>1</sup>

Sex-age group	Cost for 1 week				Cost for 1 month			
	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan
<b>FAMILIES</b>								
Family of 2: <sup>2</sup>								
20-50 years .....	\$39.80	\$50.30	\$62.40	\$77.40	\$172.60	\$218.20	\$270.20	\$335.80
51 years and over .....	37.70	48.40	59.80	71.70	163.60	209.60	259.30	310.90
Family of 3:								
Couple, 20-50 years and children--								
1-2 and 3-5 years .....	57.90	72.30	88.70	109.00	250.80	313.70	384.30	472.60
6-8 and 9-11 years .....	66.40	85.00	106.80	128.70	287.90	368.90	462.70	558.00
<b>INDIVIDUALS<sup>3</sup></b>								
Child:								
1-2 years .....	10.40	12.70	14.80	17.90	45.10	55.00	64.10	77.60
3-5 years .....	11.30	13.90	17.20	20.70	48.80	60.30	74.60	89.70
6-8 years .....	13.80	18.40	23.10	27.00	59.90	79.80	100.20	117.00
9-11 years .....	16.40	20.90	27.00	31.30	71.10	90.70	116.90	135.70
Male:								
12-14 years .....	17.10	23.70	29.70	34.90	74.20	102.90	128.70	151.20
15-19 years .....	17.80	24.60	30.60	35.50	77.10	106.50	132.50	153.70
20-50 years .....	19.00	24.30	30.60	37.00	82.50	105.50	132.60	160.40
51 years and over .....	17.30	23.20	28.60	34.30	75.00	100.40	123.90	148.80
Female:								
12-19 years .....	17.10	20.50	25.00	30.20	74.00	89.00	108.20	131.10
20-50 years .....	17.20	21.40	26.10	33.40	74.40	92.90	113.00	144.90
51 years and over .....	17.00	20.80	25.80	30.90	73.70	90.10	111.80	133.80

<sup>1</sup> Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for the thrifty food plan were computed from quantities of foods published in Family Economics Review, 1984(1). Estimates for the other plans were computed from quantities of foods published in Family Economics Review, 1983(2). The costs of the food plans are estimated by updating prices paid by households surveyed in 1977-78 in USDA's Nationwide Food Consumption Survey. USDA updates these survey prices using information from the Bureau of Labor Statistics, CPI Detailed Report, table 3, to estimate the costs for the food plans.

<sup>2</sup> 10 percent added for family size adjustment. See footnote 3.

<sup>3</sup> The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5- or 6-person--subtract 5 percent; 7- or more-person--subtract 10 percent.



# Consumer Prices

## Consumer Price Index for all urban consumers

[1967 = 100, unless otherwise noted]

Group	Unadjusted indexes			
	May 1987	April 1987	March 1987	May 1986
All items .....	338.7	337.7	335.9	326.3
Food .....	332.5	331.0	330.0	317.0
Food at home.....	318.8	316.9	315.8	302.1
Food away from home.....	372.3	371.5	370.9	358.8
Housing .....	368.9	367.7	366.4	358.5
Shelter.....	419.2	418.0	415.9	400.9
Renters' costs <sup>1</sup> .....	127.3	127.1	126.4	121.1
Rent, residential .....	289.4	288.8	288.3	278.4
Homeowners' costs <sup>1</sup> .....	124.0	123.6	123.0	118.9
Maintenance and repairs .....	381.9	382.4	383.4	367.1
Maintenance and repair services .....	435.3	437.1	439.4	425.5
Maintenance and repair commodities ..	279.6	278.7	278.5	262.9
Fuel and other utilities .....	377.5	374.2	374.9	382.5
Fuel oil and other household fuel commodities.....	<sup>2</sup> 497.7	<sup>2</sup> 500.5	<sup>2</sup> 500.6	496.8
Gas (piped) and electricity .....	433.3	425.9	428.7	444.6
Household furnishings and operation.....	254.9	255.2	254.3	249.9
Housefurnishings .....	203.7	204.7	203.8	200.8
Housekeeping supplies.....	330.1	328.2	327.7	318.3
Housekeeping services.....	353.1	352.2	351.0	345.8
Apparel and upkeep .....	218.0	218.7	215.2	206.4
Apparel commodities .....	201.8	202.6	199.1	190.7
Men's and boys' apparel .....	207.1	205.6	203.5	200.2
Women's and girls' apparel .....	179.6	182.2	177.0	164.9
Infants' and toddlers' apparel .....	316.4	319.1	319.6	318.5
Footwear .....	220.8	219.2	216.5	211.5
Apparel services .....	346.8	344.7	344.7	333.6
Transportation .....	314.6	313.3	310.6	305.7
Private transportation .....	306.3	304.8	301.9	297.8
New vehicles .....	230.6	229.9	229.2	222.8
Used cars .....	378.6	371.6	363.0	363.6
Motor fuel.....	299.7	297.2	290.0	289.3
Maintenance and repair.....	376.1	376.1	373.0	361.3
Public transportation .....	439.6	440.8	441.4	423.7
Medical care.....	458.9	457.3	455.0	429.7
Medical care commodities.....	289.6	287.5	286.3	272.3
Medical care services.....	496.0	494.7	492.1	464.2
Professional services .....	413.9	412.5	409.6	388.3
Entertainment .....	282.0	281.3	279.8	272.9
Other goods and services.....	362.0	361.1	360.3	342.1
Personal care.....	299.0	297.3	296.4	290.9
Personal and educational expenses .....	454.4	453.8	452.8	419.5

<sup>1</sup>Indexes based on December 1982 = 100 base.

<sup>2</sup>Includes wood, charcoal, and peat, not previously priced.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

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## Highlights

Housing Situation of Children

Calcium: Food Sources and Costs